INTERNATIONAL SEARCH REPORT

IB2004/051986

CLASSIFICATION OF SUBJECT MATTER ÎPC 7 H03F3/34 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 H03F Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Category ° Relevant to claim No. X EP 0 387 951 A (PHILIPS NV) 1,2,4,8 19 September 1990 (1990-09-19) column 7, line 1 - line 20; figure 2 X US 4 728 815 A (MAIN W ERIC) 1,2,4,8 1 March 1988 (1988-03-01) abstract; figure 4 Α US 2002/180490 A1 (VOORMAN JOHANNES OTTO 1-9 ET AL) 5 December 2002 (2002-12-05) cited in the application the whole document Α US 2001/038301 A1 (FRAMBACH JOHANNES P A 1-9 ET AL) 8 November 2001 (2001-11-08) figures 3-6 Further documents are listed in the continuation of box C. X Patent family members are listed in annex. Special categories of cited documents: *T* tater document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the *A* document defining the general state of the art which is not considered to be of particular relevance invention 'E' earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled "O" document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but in the art. later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 21 December 2004 27/01/2005 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 Kurzbauer, W

INTERNATIONAL SEARCH REPORT

IB2004/051986

C.(Continua	C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT								
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.							
А	US 5 399 991 A (MORAVEJI FARHOOD) 21 March 1995 (1995-03-21) figures 2,3A	1,9							
		-							

INTERNATIONAL SEARCH REPORT

IB2004/051986

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
EP 0387951	A	19-09-1990	DE	69011366 D1	15-09-1994
Li 000/301	••		DE	69011366 T2	23-02-1995
			EP	0387951 A1	19-09-1990
			HK	44296 A	22-03-1996
			JP	2274109 A	08-11-1990
			JP	2869664 B2	10-03-1999
			KR	149650 B1	01-09-1999
			US	5038114 A	06-08-1991
US 4728815	 A	01-03-1988	GB	2196499 A ,B	27-04-1988
00 1720020	••		JP	2082615 C	23-08-1996
			JP	7105698 B	13-11-1995
			JP	63114410 A	19-05-1988
			KR	9507691 B1	14-07-1995
US 2002180490	A1	05-12-2002	CN	1388924 T	01-01-2003
			WO	0219050 A1	07-03-2002
			EP	1316005 A1	04-06-2003
			JP	2004507955 T	11-03-2004
US 2001038301	A1	08-11-2001	WO	0031604 A1	02-06-2000
			EΡ	1057091 A1	06-12-2000
			JP	2002530971 T	17-09-2002
			US	6323723 B1	27-11-2001
US 5399991		21-03-1995	NONE		